

Man-Made Vitreous Fibers (MMVF) Control Lesson Guide #5



Objective: *Upon completion of this topic you will be able to:*

- Identify the health hazards associated with exposure to MMVF.
- Identify potential sources of MMVF present at all shore activities.
- Describe the special precautions required when handling MMVF.
- Describe the Navy's MMVF exposure control program and demonstrate the use of MMVF personal protective equipment.

Background

- Unlike naturally occurring asbestos, fibrous glass and mineral wools are man-made, spun from molten material into a fiber like substance. They are fire and acid resistant and as a fiber, can be woven into a cloth, such as drapes. It has been used for decades as house and thermal insulation. It's link with serious diseases has lead the Navy to adopt limits on MMVF exposure.

Health Hazards

- MMVF fibers can cause scar tissue to form (*fibrosis*) in the lungs.
- *May* cause tumors - they have been shown in lab animals but *not* proven in humans.
- It does *not appear to be as harmful as asbestos.*

The Navy MMVF Exposure Control

Program

- Controlling MMVF in the work environment.
- Adhering to strict work practices.
- Properly disposing of MMVF waste.
- Establishing Medical Surveillance if necessary.
- Industrial hygiene surveillance.
- Training people to recognize MMVF hazards and use necessary precautions.

Identification of MMVF

- Visibly, MMVF's are usually yellow or pink spun glass (like your home insulation); white, yellow, or grayish loose or batting mineral wool; or white solid ceramic material

Control of MMVF

- Personnel are not authorized to remove any MMVF without the proper PPE.
- Personnel assigned to work with MMVF may be placed in a Medical Surveillance Program.

General Workplace Control Practices

- To minimize exposure to MMVF, we must eliminate the potential of inhaling airborne fibers.
- Controlling airborne fiber and dust generation is best accomplished through engineering controls and good house keeping practices.
- Ventilation is also used to control fibers in the air

Personal Protective Equipment

- Special protection is required to work with MMVF, similar to asbestos protective equipment.
- Personnel handling MMVF materials shall wash thoroughly with soap and water before breaks and at the end of work. Showering at the completion of work is recommended.

Disposal of MMVF

- MMVF waste shall be adequately wetted before placing in heavy duty plastic bags or other suitable impermeable containers for disposal as regular solid waste in an approved sanitary landfill.
- Contact local disposal personnel to see if any other special disposal precautions pertain to the locality.

Review and Summary

- MMVF Materials are used on every shore station in the Navy. Activities are required to have applicable workers trained in the proper handling of MMVF, use of personal protective equipment, undergo medical surveillance if required, and always report MMVF hazards immediately to their supervisor.